



Linden Photonics, Inc.

Optical μ packaging



RADIATION RESISTANT PATCHCORDS

Linden's RadHard fiber optic patchcords provide a complete solution where a robust fiber optic link is needed in a harsh, high radiation environment. A wide variety of cable constructions are available to meet your specific requirements including our patented Non-Kink™ cable. Tested as per European Space Agency - ESCC Basic Specification No. 2263010



TYPICAL SPECIFICATIONS

| | |
|-----------------------|--|
| Number of Fibers | 1-3 |
| Fiber Type | Single/Multi Mode |
| Cable Diameter | 700 μ m – 2mm |
| Tensile Strength | 50lbs – >200lbs |
| Minimum Bend Radius | 5mm – 10mm |
| Attenuation @ 1310 nm | 0.45 dB/km |
| Attenuation @ 1550 nm | 0.35 dB/km |
| Temperature | -55 ⁰ C to 125 ⁰ C |



FIBER TYPE*

Singlemode

| | |
|-------------------------------------|---|
| Ge-Doped | A |
| Pure Silica Core Low Loss | B |
| Pure Silica Bend Insensitive 1310nm | C |
| Pure Silica Bend Insensitive 1550nm | D |
| Fluorine Doped | E |
| Fluorine Doped Mil Spec 49291 | F |

Multimode

| | |
|---------------------------|---|
| Step Index 50um polyimide | G |
| Ge-Doped 200um | H |
| Ge-Doped 300um | I |
| Ge-Doped 400um | J |
| Graded Index 50um | K |
| Graded Index 62.5um | L |
| Graded Index 100um | M |

*From NASA Fiber Optic Radiation Database. Additional types available upon request

CABLE JACKET**

| | |
|-----------------------|---|
| Non-Kink™ | A |
| High Tensile Strength | B |
| High Temperature | C |
| Low Temperature | D |
| Standard | E |

**Proprietary jackets suffer no degradation in tensile strength after 1000 MRad exposure

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COLOR

| | |
|---------|---|
| Natural | N |
| Black | B |
| Orange | O |
| Yellow | Y |
| Custom | X |

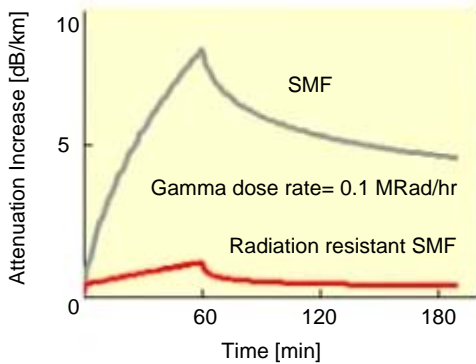
CONNECTOR***

| | |
|----------------------------|-----|
| AVIM Singlemode – PC | S1 |
| AVIM Singlemode – APC | S2 |
| AVIM Multimode – PC | S3 |
| AVIM Mini Singlemode – PC | SM1 |
| AVIM Mini Singlemode – APC | SM2 |
| AVIM Mini Multimode – PC | SM3 |

***High performance connector qualified for spaceflight by NASA.



Typical Radiation Performance



ASSEMBLY PART NUMBER

X-XX-X-XXX-XXX-X

Fiber Type

Cable Jacket

Color

Connector B
Connector A

Length (m)